

Drought Response Task Force

August 9, 2012

Illinois Rural Water Association

Small Systems Report

Illinois Rural Water Association field staff has been surveying a cross section of small systems throughout the state the past few days. The target of this informational survey was to contact groundwater supplies and determine what affect the current drought conditions are having on their wells and the system's ability to keep up with customer demand. However, during the course of our travels we did visit with a handful of systems that purchased all or a portion of their water or treated surface water. The intent of the survey was to determine how systems as a whole were coping with the severe heat and drought conditions. Over 100 systems were contacted and following is a summary of the information gathered.

1. **SUPPLY:** Most groundwater systems contacted were reporting that well levels are holding close to normal or down slightly. Very few well supplies reported levels falling to a point where it has necessitated issuance of water conservation request or orders.
2. **DEMAND:** It came as no surprise that every system contacted reported that water demands were up. On average, systems were reporting their increases were 30% - 50% above normal summertime usage. On peak days this percentage would climb even higher.
3. **ABILITY TO MEET DEMAND:** Although the systems contacted had an adequate supply of water on hand a few were experiencing difficulties in meeting the demands of its customers. Several of these systems were approaching or, in some cases, had reached their plant's capacity. They simply could not "push" any additional water into their distribution system without suffering a decline in water quality. Obviously the system operations specialists recognize this as unsustainable and recommend to their superiors when water conservation efforts need to be put in place. In all of the cases where plant capacity has become an issue, conservation efforts – some voluntary – some mandatory – has improved the situation to a point where the specialists feel comfortable that the reduced demands can be provided long-term.

One of the first things taken off line during water conservation measures is the bulk sales station. During dry times (not just in drought years) many farmers and others living in rural Illinois have become dependent on these bulk sales stations as a source for their domestic water. Unfortunately, shutting down these stations cuts them off from being

able to “drive to town” and haul a tank of water home for domestic use. Some of the systems that we visited with have recognized this fact and will make exceptions allowing domestic water to be sold in a bulk fashion. We recommended to other systems that a similar policy be adopted if it doesn’t tax their ability to provide an adequate supply of water.

4. **CONSERVATION MEASURES:** Very few of the systems visited have initiated any conservation measures but virtually every one of them has had a discussion with their Mayors or Board Presidents in determining that conservation measures were not warranted at that time. All systems contacted are monitoring the situation closely and are, or will be, ready to put in place conservation measures if drought conditions worsen their ability to meet customer demands.
5. **ADDED EXPENSES:** System specialists were asked if they were having difficulty paying the additional expenses incurred while meeting record demands on their production. Most were quick to point out that with the additional sales comes additional revenue to pay those increased expenses. However, a few systems were experiencing much higher than normal number of main breaks for this time of year. It is theorized that as the ground becomes drier and large cracks develop the dirt around the mains shifts slightly. Older cast iron and AC watermains cannot tolerate this shifting and will crack resulting in a loss of water. It is critical that these breaks be located, excavated and repaired as soon as possible. Illinois Rural Water Association Circuit Riders have been flooded with calls to assist system specialists in locating some of the leaks that do not surface. We expect this trend to continue over the next several weeks if not months.